**State** of Nebraska State Purchasing Bureau

## REQUEST FOR INFORMATION

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| SOLICITATION NUMBER | RELEASE DATE |
| RFI 33022 NPM Media over Managed IP  | March 30, 2022 |
| OPENING DATE AND TIME | PROCUREMENT CONTACT |
| April 19, 2022 2:00 p.m. Central Time | Annette Walton |

This form is part of the specification package and must be signed in ink and returned, along with information documents, by the opening date and time specified.

PLEASE READ CAREFULLY!

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| --- |
| SCOPE OF SERVICE |

The State of Nebraska (State), Administrative Services, Materiel Division, State Purchasing Bureau (SPB), is issuing this Request for Information RFI 33022 NPM Media over Managed IP for the purpose of gathering information to provide Nebraska Public Media an end-to-end solution for transition from SDI infrastructure to Media Over Managed IP infrastructure implementing SMPTE 2022 and SMPTE 2110.

Written questions are due no later than April 7, 2022, and should be submitted via ShareFile. Written questions may also be sent by email to: annette.walton@nebraska.gov

Sealed RFI responses should be submitted via ShareFile by the date and time of the RFI opening indicated above.

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1. SCOPE OF THE REQUEST FOR INFORMATION

The State of Nebraska, Administrative Services (AS), Materiel Division, State Purchasing Bureau (hereafter known as State Purchasing Bureau), is issuing this Request for Information, RFI 33022 NPM Media over Managed IP for the purpose of gathering information to provide Nebraska Public Media an end to end solution for transition from SDI infrastructure to Media Over Managed IP per Section III.

**ALL INFORMATION PERTINENT TO THIS REQUEST FOR INFORMATION CAN BE FOUND ON THE INTERNET AT:** <http://das.nebraska.gov/materiel/purchasing.htm>l

* 1. SCHEDULE OF EVENTS

The State expects to adhere to the tentative procurement schedule shown below. It should be noted, however, that some dates are approximate and subject to change.

|  |  |
| --- | --- |
| **ACTIVITY** | **DATE/TIME** |
| 1 | Release Request for Information | March 30, 2022 |
| 2 | Last day to submit written questions | April 7, 2022 |
| 3 | State responds to written questions through Request for Information “Addendum” and/or “Amendment” to be posted to the internet at: <http://das.nebraska.gov/materiel/purchasing.html>  | April 12, 2022 |
| 4 | Virtual RFI openingLocation: Zoom Meeting | April 19, 20222:00 PM Central Time |
| 5 | Conduct oral interviews/presentations and/or demonstrations (if required) | To Be Determined |

1. RFI RESPONSE PROCEDURES
	1. OFFICE AND CONTACT PERSON

Responsibilities related to this Request for Information reside with the State Purchasing Bureau. The point of contact for the RFI is as follows:

Name: Annette Walton, Procurement Contract Officer

Agency: State Purchasing Bureau

Address: 1526 K Street, Suite 130

 Lincoln, NE 68508

Telephone: 402-471-1428

E-Mail: annette.walton@nebraska.gov

* 1. GENERAL INFORMATION

A subsequent Request for Proposal (RFP) may not be issued as a result of this RFI. There will not be a contract as a result of this RFI and the State is not liable for any cost incurred by vendors in replying to this RFI. If an RFP is issued, the information provided will assist the State of Nebraska in developing the Request for Proposal. This RFI does not obligate the State to reply to the RFI responses, to issue an RFP, or to include any RFI provisions or responses provided by vendors in any RFP.

* 1. COMMUNICATION WITH STATE STAFF

From the date the Request for Information is issued and until RFI opening (as shown in the Schedule of Events), contact regarding this RFI between potential vendors and individuals employed by the State should be restricted to written communication with the staff designated above as the point of contact for this Request for Information.

The following exceptions to these restrictions are permitted:

* + 1. Written communication with the person(s) designated as the point(s) of contact for this Request for Information;
		2. contacts made pursuant to any pre-existing contracts or obligations; and
		3. State-requested presentations, key personnel interviews, clarification sessions, or discussions.

Violations of these conditions may be considered sufficient cause to reject a vendor’s response to the RFI. No individual member of the State, employee of the State, or member of the Interview Committee is empowered to make binding statements regarding this RFI. The State of Nebraska will issue any clarifications or opinions regarding this RFI in writing.

* 1. WRITTEN QUESTIONS AND ANSWERS

Any explanation desired by a vendor regarding the meaning or interpretation of any Request for Information provision should be submitted in writing to the State Purchasing Bureau and clearly marked “RFI Number; 33022 NPM Media over Managed IP Questions”. It is preferred that questions be sent via ShareFile

<https://nebraska.sharefile.com/r-r84b5a805ef194786af7d9f2634847805>

It is recommended that Bidders submit questions sequentially numbered, include the RFI reference and page number using the following format.

|  |  |  |  |
| --- | --- | --- | --- |
| Question Number | RFI Section Reference | RFI Page Number | Question |
|  |  |  |  |

Written answers will be provided through an addendum to be posted on the Internet at <http://das.nebraska.gov/materiel/purchasing.html> on or before the date shown in the Schedule of Events.

* 1. ORAL INTERVIEWS/PRESENTATIONS AND/OR DEMONSTRATIONS

The Review Committee(s) may conclude that oral interviews/presentations and/or demonstrations are required. All vendors may not have an opportunity to interview/present and/or give demonstrations. The presentation process will allow the vendors to demonstrate their RFI offering, explaining and/or clarifying any unusual or significant elements related to their response.

* 1. SUBMISSION OF RESPONSE

The following describes the requirements related to the RFI submission, handling and review by the State.

To facilitate the response review process, one (1) original of the entire RFI response should be submitted. RFI responses should be submitted by the RFI due date and time via ShareFile and the following link

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<https://nebraska.sharefile.com/r-r3aedc919d61b477ebab406b86698c35b>

RFI responses should reference the request for information number and be submitted via ShareFile.

* 1. PROPRIETARY INFORMATION

Data contained in the response and all documentation provided therein, become the property of the State of Nebraska and the data become public information upon opening the response. If the vendor wishes to have any information withheld from the public, such information must fall within the definition of proprietary information contained within Nebraska’s public record statutes. All proprietary information the vendor wishes the state to withhold must be submitted as a separate file, which is separate from the remainder of the response. The separate file must be clearly named PROPRIETARY. Vendor may not mark their entire Request for Information as proprietary. Failure of the vendor to follow the instructions for submitting proprietary and copyrighted information may result in the information being viewed by other vendors and the public. Proprietary information is defined as trade secrets, academic and scientific research work which is in progress and unpublished, and other information which if released would give advantage to business competitors and serve no public purpose (see Neb. Rev. Stat. § 84-712.05(3)). In accordance with Attorney General Opinions 92068 and 97033, vendors submitting information as proprietary may be required to prove specific, named competitor(s) who would be advantaged by release of the information and the specific advantage the competitor(s) would receive. Although every effort will be made to withhold information that is properly submitted as proprietary and meets the State’s definition of proprietary information, the State is under no obligation to maintain the confidentiality of proprietary information and accepts no liability for the release of such information.

* 1. REQUEST FOR INFORMATION OPENING

The sealed responses will be publicly opened and the responding entities announced on the date, time, and location shown in the Schedule of Events. The RFI Opening will be held virtually via Zoom:

Join Zoom Meeting
<https://us02web.zoom.us/j/85755236598?pwd=U05EQmtOazJLa2dHNnNGbEkzUW5KZz09>

1. PROJECT DESCRIPTION AND SCOPE OF WORK

The vendor should provide the following information in response to this Request for Information.

* 1. PURPOSE AND BACKGROUND

Nebraska Public Media is currently seeking information on migration to Media Over Managed Internet Protocol (IP). Media Over Managed IP provides for a high-speed IP network to support all media for today and the future replacing traditional legacy routing and distribution systems. An all IP based facility can support all types of media transport including SD, HD, UHD, transport stream, Zixi, AES 67 Audio and any other future formats (such as ATSC 3.0 DASH/IF). IP based architecture provides many benefits and is signal and data agnostic, redundant, resilient and infinitely scalable.

Benefits include;

1. Scales to large I/O size
2. Use of generic I/T Hardware (COTS)
3. No more audio embed/de-embed
4. No more audio shufflers
5. Reduce cabling
6. Distributed IP Engines
7. Signal and Data agnostic
8. Fully redundant architecture
9. Built in Up/Down cross conversion
	1. CURRENT ENVIRONMENT

Nebraska Public Media currently has a 256X192 legacy Venus routing system which manages all signal routing and distribution for incoming fiber and satellites feeds, live studio feeds, server record and playout, monitoring and distribution.

The current system is beyond its anticipated lifespan and will need to be replaced. It is the understanding that Nebraska Public Media would benefit from a holistic approach using SMPTE 2022 and SMPTE 2110 standards-based technology.

* 1. SYSTEM OVERVIEW

The overall system concept should be comprised of Common off the Shelf components (COTS) developed for large scale enterprise IT systems. In order to provide the same performance and ease in deployment desired by television broadcaster application specific devices and software defined networking is required.

This allows conversion from various signal such as HD SDI and MADI to be built directly into the switch or with outboard rack mounted converters. The deployment should also be based on industry standards for media and IT including SMPTE 2022-2, 2022-6, 2022-7, SMPTE 2110-10, 20, 21, 40, 50, SMPTE 2059-1&2 (PTP), AES 67 and others.

The overall system should address these major components or equivalent;

1. Common of the shelf components (COTS).
2. High Speed Network with low latency for synchronized real time signal distribution.
3. Use of existing Precision Time Protocol (PTP) for clean switching and time synchronization in IP domain.
4. Software Defined Network SDN to provide centralized network intelligence.
5. Orchestration to program automated behaviors in a network to coordinate required hierarchy and priority through the network.
	1. SYSTEM SIMPLIFIED DIAGRAM

Leaf In 1-96

Leaf In 97-192

Leaf Out 1-92

Leaf Out 97-192

Spine 100 Gb

Spine 100 Gb

PTP

PTP

* 1. SCOPE OF WORK

The scope of work shall include:

1. Provide a detailed description of proposed solution and how it can address the current and future requirements of Nebraska Public Media and answer the following questions.
* Is there any customer furnished equipment required for your solution?
* Does the solution provide for hardware control panels? Software? Both?
* Is there an upgrade path for scalability? Move to UHD?
* How much of the system can be virtualized? Redundancy?
* Does your system provide API for reporting to station NMCS monitor and control system?
1. Provide what security protocols are included with your solution.
2. Provide an explanation on why your product is unique in this market and advantages for Nebraska Public Media.
3. Provide pricing estimate for overall system and any current or future options.
4. Be prepared to provide a product demonstration either virtually or on premise.

# Form AVendor Contact Sheet

Request for Information Number 33022 NPM MEDIA OVER MANAGED IP

Form A should be completed and submitted with each response to this solicitation document. This is intended to provide the State with information on the vendor’s name and address, and the specific persons who are responsible for preparation of the vendor’s response.

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| --- |
| Preparation of Response Contact Information |
| Vendor Name: |  |
| Vendor Address: |  |
| Contact Person & Title: |  |
| E-mail Address: |  |
| Telephone Number (Office): |  |
| Telephone Number (Cellular): |  |
| Fax Number: |  |

Each vendor shall also designate a specific contact person who will be responsible for responding to the State if any clarifications of the vendor’s response should become necessary. This will also be the person who the State contacts to set up a presentation/demonstration, if required.

|  |
| --- |
| Communication with the State Contact Information |
| Vendor Name: |  |
| Vendor Address: |  |
| Contact Person & Title: |  |
| E-mail Address: |  |
| Telephone Number (Office): |  |
| Telephone Number (Cellular): |  |
| Fax Number: |  |